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SOURCE: CGD 74–125A, 47 FR 15267, Apr. 8, 1982, unless otherwise noted.

Subpart 112.01—Definitions of Emergency Lighting and Power Systems

§ 112.01–1 Purpose.

The purpose of this subpart is to define types of emergency lighting and power systems.

§ 112.01–5 Manual emergency lighting and power system.

A manual emergency lighting and power system is one in which a single manual operation, such as the manual operation of a switch from an ''off'' to an ''on'' position, is necessary to cause the emergency power source to supply power to the emergency loads.

§ 112.01–10 Automatic emergency lighting and power system.

An automatic emergency lighting and power system is one in which a reduction in potential from the ship's service power and lighting plant causes

the emergency power source to supply power to the emergency loads.

§ 112.01–15 Temporary emergency power source.

A temporary emergency power source is one of limited capacity that carries, for a short time, selected emergency loads while an emergency power source of larger capacity is being started.

§ 112.01–20 Final emergency power source.

A final emergency power source is one that functions after the temporary emergency power source is disconnected.

Subpart 112.05—General

§ 112.05–1 Purpose.

(a) The purpose of this part is to ensure a dependable, independent, and dedicated emergency power source with sufficient capacity to supply those services that are necessary for the safety of the passengers, crew, and other persons in an emergency and those additional loads that may be authorized under paragraph (c) of this section.

(b) No load may be powered from an emergency power source, except:

(1) A load required by this part to be powered from the emergency power source;

(2) A bus-tie to the main switchboard that meets § 112.05–3; and

(3) Emergency loads that may be necessary to maintain or restore the propulsion plant, such as control systems, controllable pitch propellers, hydraulic pumps, control air compressors, and machinery necessary for dead-ship start-up.

(c) Other loads may be authorized by the Commanding Officer, Marine Safety Center (MSC), to be connected to the emergency source of power to provide an increased level of safety in recognition of a unique vessel mission or configuration. When these loads are authorized, the emergency power source must—

(1) Be sized to supply these loads using a unity (1.0) service factor; or

(2) Be provided with automatic load shedding that removes these loads and operates before the emergency generator trips due to overload. The automatic load shedding circuit breakers must be manually reset.

[CGD 74–125A, 47 FR 15267, Apr. 8, 1982, as amended by CGD 94–108, 61 FR 28286, June 4, 1996; 61 FR 36787, July 12, 1996]

§ 112.05–3 Main-emergency bus-tie.

Each bus-tie between a main switchboard and an emergency switchboard must:

(a) Disconnect automatically upon loss of potential at the emergency switchboard;

(b) Be arranged to prevent parallel operation of an emergency power source with any other source of electric power, except for interlock systems for momentary transfer of loads; and

(c) If arranged for feedback operation, open automatically upon overload of the emergency power source before the emergency power source is tripped off the line from the overload.

§ 112.05–5 Emergency power source.

(a) The emergency power source must meet table 112.05–5(a) and have the capacity to supply all loads that are simultaneously connected to it, except a load on a bus-tie to the main switchboard or non-required loads that are connected in accordance with § 112.05–1(c).

TABLE 112.05–5(A)

Size of vessel and service	Type of emergency power source or lighting	Period of operation and minimum capacity of emergency power
Passenger vessels:		
Ocean, Great Lakes, or coastwise; or on an international voyage.	Temporary emergency power source; and final emergency power source (automatically connected storage battery or an automatically started generator).	36 hours.[1] [2]